WHAT IS CLAIMED IS:

5

10

15

20

25

 A service verifying system for providing a plurality of services, comprising:

authentication information storing means for storing authentication information to authenticate a user permitted to utilize a first service;

available service information storing means for storing information about services available to respective users;

permission message information storing means for, on the occasion of permitting utilization of a second service different from the first service, storing message information based on a permission message to distinguish a permission of the utilization thereof;

first message receiving means for receiving a message according to an authentication method of a first service;

authenticating means for verifying the message received by the first message receiving means, based on the authentication information in the authentication information storing means, to identify a user of the first service and authenticate whether the first service is available to the user;

other service utilization request receiving means for receiving a utilization request for utilization of the second service, which is transmitted from the user authenticated to utilize the first service by the authenticating means;

other service availability determining means for, on the occasion of receiving the utilization request by the other service utilization request receiving means, determining whether the second service is available to the user, based on the information in the available service information storing means;

5

10

15

20

25

permission message information updating means for, when the other service availability determining means determines that the second service is available, enabling the message information based on a permission message in the permission message information storing means;

permission response transmitting means for, when the other service availability determining means determines that the second service is available, transmitting a permission response based on the permission message;

second message receiving means for receiving a message based on the permission response;

service provision propriety determining means for verifying determines whether the second service is providable, based on the message received by the second message receiving means and the message information in the permission message information storing means; and

permission message status releasing means for, when the service provision propriety determining means determines that the second service is providable, permitting utilization of the second service and disabling the message information in the permission message information storing means.

5

10

15

20

25

2. The service verifying system according to Claim 1, further comprising additional information storing means for storing additional information for verifying a message further based on additional information used for utilization of the second service;

wherein the second message receiving means receives the message further based on the additional information; and

wherein the service provision propriety determining means determines whether the second service is providable, further based on the additional information in the additional information storing means, to verifying whether the second service is providable for the second terminal.

3. The service verifying system according to Claim 1, further comprising:

area information storing means for storing available area information about an area where the second service is available; and

area information updating means for, on the

occasion of receiving the utilization request by the other service utilization request receiving means, deriving the available area information from information about a staying area of the first terminal and storing the available area information in the area information storing means:

5

10

15

20

2.5

wherein the service provision propriety determining means further verifies whether a staying area of the second terminal is within an area where the service is available, based on the available area information in the area information storing means, and determines that the second service is providable, when a staying area of the second terminal is within an area where the service is available.

- 4. The service verifying system according to Claim 3, wherein when the permission response is enable, based on the message information in the available message information storing means, and when the staying area of the first terminal moves off the available area proved by the available area information storing means, the area information updating means stores the available area information derived from information about the staying area after the movement of the first terminal, into the area information storing means.
 - 5. The service verifying system according to

Claim 3, wherein when the permission response is enable, based on the message information in the available message information storing means, when the staying area of the first terminal moves off the available area proved by the available area information storing means, and when the other service utilization request receiving means receives the utilization request, the area information updating means stores the available area information derived from information about the staying area after the movement of the first terminal, in the area information storing means.

5

10

15

20

25

 $\begin{tabular}{lll} 6. & The service verifying system according to \\ Claim 1, further comprising: \\ \end{tabular}$

time information storing means for storing available time information about a time period in which the second service is available; and

time information updating means for, on the occasion of receiving the utilization request by the other service utilization request receiving means, storing available time information into the time information storing means;

wherein the service provision propriety determining means further verifies whether a time when the second message receiving means receives the message is within the time period in which the service is available, based on the available time information

stored in the time information storing means, and wherein when the time of reception of the message is within the time period in which the second service is available, the service provision propriety determining means determines that the second service is providable.

5

10

15

20

25

7. The service verifying system according to Claim 1, wherein the permission response transmitting means transmits the permission response further based on available area information derived from information about a staying area of the first terminal, and

wherein the service provision propriety determining means further verifies whether a staying area of the second terminal is within an area where the service is available, based on the message received by the second message receiving means, and determines that the second service is providable, when a staying area of the second terminal is within an area where the service is available.

8. The service verifying system according to Claim 1, wherein the permission response transmitting means transmits the permission response further based on available time information, and

wherein the service provision propriety determining means further verifies whether a time when the second message receiving means receives the message, is within the time period derived from the

message received by the second message receiving means, and wherein when the time of reception of the message is within a time period in which the service is available, based on the message received by the second message receiving means, the service provision propriety determining means determines that the second service is providable.

5

10

15

20

25

9. An authentication requesting terminal permitted to utilize a first service provided by a service verifying system and configured to execute authentication for utilization of the first service, the authentication requesting terminal comprising:

authentication information storing means for storing authentication information for utilization of the first service;

first message transmitting means for transmitting a message based on the authentication information in the authentication information storing means and according to an authentication method;

other service utilization request transmitting means for transmitting a utilization request for utilization of a second service when the first service is available; and

permission response receiving means for receiving a permission response based on a permission message.

10. The authentication requesting terminal

according to Claim 9, wherein the permission response receiving means receives a permission response further based on available area information of the second service.

5

11. The authentication requesting terminal according to Claim 9, wherein the permission response receiving means receives a permission response further based on available time information of the second service.

10

12. A service utilizing terminal for, based on a response transmitted to the authentication requesting terminal for the second service, receiving provision of a second service, the service utilizing terminal comprising:

15

second message transmitting means for transmitting a message for utilization of the second service, based on a permission response received by the authentication requesting terminal;

20

wherein the message is based on a permission response received by the authentication requesting terminal from the service verifying system.

13. The service utilizing terminal according to Claim 12, further comprising additional information storing means for storing additional information used for utilization of the second service,

25

wherein the message transmitted by the second

message transmitting means is further based on the additional information in the additional information storing means.

5

10

15

20

25

- A service providing method for providing services in a service verification network system, the service verification network system comprising a service verifying system for providing a plurality of authentication requesting terminal services. an authenticated by the service verifying system to utilize a first service provided by the service verifying system, and a service utilizing terminal for utilizing a second service provided by the service verifying system, based on a response transmitted to the authentication requesting terminal for the second service, said service providing method comprising:
- a first message transmitting step wherein the authentication requesting terminal transmits a message based on authentication information to the service verifying system, according to an authentication method:
- an authenticating step wherein the message received in the first message transmitting step is verified based on authentication information previously stored in the service verifying system, to identify a user of the authentication requesting terminal and authenticate whether the first service is available to

the user of the first service;

5

10

15

20

25

an other service utilization request transmitting step wherein when the first service is available, the authentication requesting terminal transmits a utilization request for utilization of the second service to the service verifying system;

an other service availability determining step wherein when the utilization request is received in the other service utilization request transmitting step, the service verifying system determines whether the second service is available to the user, based on an information about services available to respective users previously stored in the service verifying system;

a permission message information updating step wherein when it is determined in the other service availability determining step that the second service is available, the service verifying system stores message information based on a permission message to distinguish a permission of utilization of the second service, into permission message information storing means:

a permission response transmitting step wherein when it is determined in the other service availability determining step that the second service is available, the service verifying system transmits a permission

response based on the permission message, to the authentication requesting terminal;

a second message transmitting step wherein the service utilizing terminal transmits a message based on the permission response received by the authentication requesting terminal in the permission response transmitting step, to the service verifying system;

5

10

15

20

25

a service provision propriety determining step wherein it is verified whether the second service is providable, based on the message received by the second message receiving step and the message information in the permission message information storing means; and

a permission message status releasing step wherein when it is determined in the service provision propriety determining step that the second service is providable, utilization of the second service is permitted, and disabling the message information in the permission message information storing means.

15. The service providing method according to Claim 14, wherein the second message receiving step receives a message further based on additional information, and

wherein the service provision propriety determining step determines whether the second service is providable, further based on the additional information in the additional information storing

means.

5

1.0

1.5

20

25

16. The service providing method according to Claim 14, further comprising an area information updating step of, on the occasion of receiving the utilization request in the other service utilization request transmitting step, deriving available area information from information about a staying area of the authentication requesting terminal and storing the available area information into area information storing means,

wherein the service provision propriety determining step further verifies whether a staying area of the service utilizing terminal is within an area where the service is available, based on the available area information in the area information storing means, and determines that the second service is providable, when a staying area of the service utilizing terminal is within an area where the service is available.

17. The service providing method according to Claim 16, wherein when the permission response is enable, based on the message information in the available message information storing means, and when the staying area of the authentication requesting terminal moves off the available area proved by available area information storing means, the area

information updating step stores the available area information derived from information about the staying area after the movement of the terminal, in the area information storing means.

5

10

1.5

20

25

- 18. The service providing method according to Claim 16, wherein when the permission response is enable, based on the message information in the available message information storing means, and when the staying area of the authentication requesting terminal moves off the available area proved by available area information storing means, when the authentication requesting terminal transmits the utilization request for utilization of the second service in the other service utilization request transmitting step, the area information updating step stores the available area information derived from information about the staying area after the movement of the terminal, in the area information storing means.
- 19. The service providing method according to Claim 14, further comprising a time information updating step of, on the occasion of receiving the utilization request in the other service utilization request transmitting step, storing available time information about a time period in which the second service is available, into time information storing means.

O

wherein the service provision propriety determining step further verifies whether a time when the service verifying system receives the message in the second message transmitting step is within the time period in which the service is available, based on the available time information stored in the time information storing means, and wherein when the time of reception of the message is within the time period in which the second service is available, the service provision propriety determining means determines that the second service is providable.

5

10

15

20

25

20. The service providing method according to Claim 14, wherein the permission response transmitting step transmits the permission response further based on available area information derived from information about a staying area of the authentication requesting terminal, and

wherein the service provision propriety determining step further verifies whether a staying area of the service utilizing terminal is within an area where the service is available, based on the message received by the second message receiving means, and determines that the second service is providable, when a staying area of the service utilizing terminal is within an area where the service is available.

21. The service providing method according to

Claim 14, wherein the permission response transmitting step transmits the permission response further based on available time information, and

wherein the service provision propriety determining step further verifies whether a time when the service verifying system receives the message in the second message transmitting step is within a time period derived from the message received by the second message receiving means, and wherein when the time of reception of the message is within the time period in which the service is available, based on the message received by the second message receiving means, the provision propriety determining service means determines that the second service is providable.

10

5